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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,573	06/23/2003	Kinya Aota	503.35255V15	9653

20457 7590 07/19/2005

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EXAMINER	
CANFIELD, ROBERT	
ART UNIT	**PAPER NUMBER**
3635	

DATE MAILED: 07/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/600,573	AOTA ET AL.	
	Examiner	Art Unit	
	Robert J. Canfield	3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 June 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16,18-32,34,35* is/are rejected.

7)☒ Claim(s) *17 and 33* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 June 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 08/820,231.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *06/23/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. This is a first Office action on the merits for application serial number 10/600573 filed 06/23/03 as a divisional of application serial number 08/820231 which issued as U.S. Patent 6,5818,19. Claims 1-35 are pending.

2. The examiner acknowledges receipt of the IDS filed 06/23/03. All of the information referred to therein has not been considered as it fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. The information disclosure statement also fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. Copies of several of the citations under the Non-Patent Literature section were not found in the electronic file and were not readily available to the examiner for consideration. Further, several of the citations appear to be in a language other than English. Similarly, copies of each of the foreign patent documents were not found in the electronic file or the files of the parent and related applications. The examiner has considered each document he was readily able to obtain a copy of. Note that the figures of JP-54-011250 appear to be of particularly relevance however it does not include a concise explanation of the relevance.

3. Claim 1 is objected to because of the following informalities: "member" at line 1 should be the plural - - members - -. Appropriate correction is required.

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-9, 11-16, 18-25, 27-32, 34 and 35 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of U.S. Patent No. 6,581,819 in view of WO 93/10935.

Each of the steps of the instant claims are provided or inherent from carrying out a friction stir weld except for the probe being of material harder than that of the members and the cutting off of remaining material. Note the vertical members of the patent meet the limitation of the cross members of the instant application.

WO 93/10935 teaches in at least the abstract that it was known at the time of the invention to use a probe being of material harder than that of the members welded. It would have been obvious at the time of the invention to one having ordinary skill in the

art to have used a probe being of material harder than that of the members as this was known and is required to affect the friction stir weld and consume the raised portions.

6. Claims 1-8, 10-12, 22-24 and 26-28 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 2 of copending Application No. 10/600607 in view of WO 93/10935 and U.S. Patent 5,449,107 to Umeno et al.

This is a provisional obviousness-type double patenting rejection.

Each of the steps of the instant claims are provided or inherent from carrying out a friction stir weld except for the probe being of material harder than that of the members and the cutting off of remaining material.

WO 93/10935 teaches in at least the abstract that it was known at the time of the invention to use a probe being of material harder than that of the members welded. It would have been obvious at the time of the invention to one having ordinary skill in the art to have used a probe being of material harder than that of the members as this was known and is required to affect the friction stir weld and consume the raised portions.

U.S. Patent 5,449,107 to Umeno et al. teaches at at least column 8, lines 29-33 that it was known at the time of the invention to remove by grinding or "cut off" remaining portions of a welding after welding. It would have been obvious at the time of the invention to one having ordinary skill in the art to have cutting of any remaining portions after the weld as taught by Umeno at least to provide a smooth finish. Also

note that each of U.S. Patents 1,954,511 to Adams and 3,755,884 to Dupy also teach removing any remaining or objectionable material after a welding step.

7. Claims 1-3 and 20-28 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of copending Application No. 10/600610 in view of WO 93/10935 and U.S. Patent 5,449,107 to Umeno et al.

This is a provisional obviousness-type double patenting rejection.

Each of the steps of the instant claims are provided or inherent from carrying out a friction stir weld except for the probe being of material harder than that of the members and the cutting off of remaining material.

WO 93/10935 teaches in at least the abstract that it was known at the time of the invention to use a probe being of material harder than that of the members welded. It would have been obvious at the time of the invention to one having ordinary skill in the art to have used a probe being of material harder than that of the members as this was known and is required to affect the friction stir weld and consume the raised portions.

8. Claims 1-9, 11, 12, 20-25 and 27 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of copending Application No. 10/600615 in view of WO 93/10935 and U.S. Patent 5,449,107 to Umeno et al.

This is a provisional obviousness-type double patenting rejection.

Each of the steps of the instant claims are provided or inherent from carrying out a friction stir weld except for the probe being of material harder than that of the members and the cutting off of remaining material.

WO 93/10935 teaches in at least the abstract that it was known at the time of the invention to use a probe being of material harder than that of the members welded. It would have been obvious at the time of the invention to one having ordinary skill in the art to have used a probe being of material harder than that of the members as this was known and is required to affect the friction stir weld and consume the raised portions.

U.S. Patent 5,449,107 to Umeno et al. teaches at at least column 8, lines 29-33 that it was known at the time of the invention to remove by grinding or "cut off" remaining portions of a welding after welding. It would have been obvious at the time of the invention to one having ordinary skill in the art to have cutting of any remaining portions after the weld as taught by Umeno at least to provide a smooth finish. Also note that each of U.S. Patents 1,954,511 to Adams and 3,755,884 to Dupy also teach removing any remaining or objectionable material after a welding step.

9. Claims 17 and 33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert J. Canfield whose telephone number is 571-272-6440. The examiner can normally be reached on M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Friedman can be reached on 571-272-6842. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert J Canfield
Primary Examiner
Art Unit 3635

06/10/05